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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------------------------------------------------------------------------|-------------|----------------------|-------------------------|------------------|
| 10/649,264 | 08/27/2003 | Joachim Hessler | V0I0272.US | 7200 |
| 7590 | 06/02/2005 | | EXAMINER | |
| Todd T. Taylor Taylor & Aust, P.C. 142 S. Main Street P.O. Box 560 Avilla, IN 46710 | | | HALPERN, MARK | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1731 | |
| | | | DATE MAILED: 06/02/2005 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/649,264 | HENSSLER, JOACHIM |
| | Examiner | Art Unit |
| | Mark Halpern | 1731 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 4/11/2005.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-146 is/are pending in the application.

4a) Of the above claim(s) 1-30 and 89-146 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 31-88 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

DETAILED ACTION

1) Acknowledgement is made of Amendment received 4/11/2005. Applicant amends claims 31, 38, 46, 47 and 88.

Information Disclosure Statement

2) German prior art document DE 197 06 940, referred on pg. 17 of the Specification, and document E 40 05 420, referred to on pg. 18 of the Specification, are not provided.

Specification

3) German prior art document DE 197 06 940, referred on pg. 17, and document E 40 05 420, referred to on pg. 18, of the Specification, are not provided. The disclosure of document E 40 05 420 is considered to be part of the description. A copy translated into English is requested.

4) Terms, such as SCT and FbM, on pg. 9 of the Specification, are not clear; they follow a foreign language short-term designation and are not related to the description recited. It is not clear how RL stands for tear length as recited on pg. 13.

5) The phrase "the angle of attack of the dewatering" recited on pg. 9, is not clear.

6) It is not clear as to what is "the effective foil angle" recited on pg. 10 and how it relates to "alpha" angles shown in Figure 3c, 3d, 5, and an angle shown in Fig. 9.

Drawings

- 7) Foreign language recitation still exists in Figs. 9-17, 22, and is not accepted.
- 8) Suction box 60, recited in Specification, pg. 22, line 17, is not shown in Fig. 22.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 7) Claims 47, 62, 84-88, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 47: it is not clear as to what is "an IBS Varioline-system". Trademark names may not be used in claims.

Claim 62: is not clear as to what is an angle of attack and what is being attacked. In the amended specification the angle is not defined; it is just recited as "examples of angles of attack".

Claims 84, 86: the various types of paper recited are not clear, for example, liner, graphic or sack Kraft paper. It is requested that a copy of pages from quoted computer site be provided, since unable to verify all the terms.

Claim 88: it is not clear what are RL L/Q. The terms do not appear as a ratio form. The amended recitation in the specification does not define the terms of the ratio.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8) Claims 31-47, 53-54, 62-65, 67-76, are rejected under 35 U.S.C. 102(b) as being anticipated by Rauchmaul (AT 355 412, translated copy provided).

Claims 31-39, 63, 70: Rauchmaul discloses system and structures for dewatering a papermaking material in a forming zone wherein negative pressure gradient is adjusted in the cross direction over dewatering suction boxes under a wire carrying a fibrous web over a dewatering element, which includes wire slots at cross directional angle cross to the flow of the stock (pgs. 1-10). This reads on creating zonal pressure gradient under a moving web and influencing a main fiber direction in the fiber material web, because the stock containing fiber flows under vacuum and gravity in the direction of the slanted opening creating a zonal pressure in the slanted opening. The structural design of Rauchmaul is the same as in the present invention.

Claim 40: foil strip is shown in Figure 2.

Claims 41-47, 65, 67-69, 71-74: slotted plate and its construction is shown in Figure 2.

Claims 53-54, 62, 64: dewatering element and its construction is shown in Figures 1-2.

Claims 75-76: negative pressure is used.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9) Claims 48-52, 55-61, 66, 77-88, are rejected under 35 U.S.C. 103(a) as being unpatentable over Rauchmaul.

Claims 48-52: Rauchmaul is applied as above for claim 38, Rauchmaul is silent on the curvature radius of a curved surface of a guiding element, however it would have been obvious to one skilled in the art at the time the invention was made, that the curvature radius of a curved surface of a guiding element be of any radius based on the process requirements to minimize the cost of dewatering.

Claims 55-61, 66: control systems for operating a paper machine are well known in the art.

Claims 77-88: it would have been obvious to one skilled in the art at the time the invention was made, that the dewatering can be carried with any papermaking machine, with regard to any number of plies formed, and with regard to any fiber or fiber suspension consistency.

Response to Amendment

10) Corrected drawing Figure 20 is accepted.
11) Cross-Reference to Related Application is accepted.

12) Applicant's arguments filed 4/11/2005, have been fully considered but they are not persuasive.

In regard to the independent claim 31, Applicant alleges that the cited prior art, Rauchmaul, does not disclose "...producing at least one zonal pressure gradient in the fibrous suspension during said dewatering step; and influencing a main fiber direction in the fiber material web".

Rauchmaul discloses creating zonal pressure gradient under a moving web and influencing a main fiber direction in the fiber material web, because the stock containing fiber flows under vacuum and gravity in the direction of the slanted opening creating a zonal pressure in the slanted opening.

The Applicant argument regarding the dependent claims is based on the resolution of the independent claim.

Conclusion

13) **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Halpern whose telephone number is 571-272-1190. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark Halpern
Primary Examiner
Art Unit 1731